

I claim:

1. A system comprising at least one of:

a manager component of a network having programmed therein alternate routes for a

destination address, such that upon failure of a first node of the network to which the

destination address is initially routed, the manager component selects one of the alternate

routes to route the destination address to a second node of the network;

a first switch of the network having a port for each of at least a third and a fourth

node of the network, such that upon failure of the third node, the first switch remaps a

destination address initially mapped to the port for the third node to the port for the fourth

node; and,

a second switch of the network having an input port for each of at least a fifth and a

sixth node of the network, and a visible output port and one or more hidden output ports

to receive an expanded port range from an assigning manager component, such that upon

failure of fifth node, the second switch uses the expanded port range to remap a

destination address initially mapped to the input port for the fifth node to the input port

for the sixth node.

2. The system of claim 1, wherein the alternate routes travel through the network via
one or more switches.

3. The system of claim 1, wherein the first switch maintains one or more internal tables
in which the destination address initially mapped to the port for the third node and
remapped to the port for the fourth node upon failure of the third node is stored.

4. The system of claim 1, wherein the second switch maintains one or more internal tables in which the destination address initially mapped to the input port for the fifth node and remapped to the input port for the sixth node is stored.
5. The system of claim 1, wherein the first switch comprises a first sub-switch and a second sub-switch.
6. The system of claim 1, wherein the second switch comprises a first sub-switch and a second sub-switch.
7. The system of claim 1, wherein the manager component and the assigning manager component each comprise a subnet manager (SM).
8. The system of claim 1, wherein the destination address initially routed to the first node, the destination address initially mapped to the port for the third node, and the destination address initially mapped to the port for the fifth node, each comprise a location identifier (LID).
9. The system of claim 1, wherein the expanded port range comprises an expanded location identifier (LID) mask count (LMC) range.
10. The system of claim 1, wherein each of the first, the second, the third, the fourth, the fifth, and the sixth nodes comprises a channel adapter (CA).

11. A method comprising:

routing a destination address over an initial path to a first node connected to a first port on a switch, the destination address initially mapped to the first port on the switch; and,

upon failure of the first node, performing an action for a second node to failover for the first node selected from the group essentially consisting of:

routing the destination address over an alternate path to the second node selected by a manager component; and,

remapping the destination address from the first port on the switch to a second port on the switch connected to the second node.

12. The method of claim 11, further initially comprising programming the alternate path in the manager component.

13. The method of claim 11, further initially comprising receiving by the switch of an expanded port range from an assigning manager component due to the switch having one or more hidden output ports in addition to a visible output port.

14. The method of claim 11, further comprising maintaining one or more internal tables by the switch in which the destination address is initially mapped to the first port on the switch.

15. The method of claim 11, wherein remapping the destination address comprises remapping the destination address internally by the switch.

16. An article comprising:

a computer-readable medium; and,

means in the medium for performing an action for a failover node to take over a destination address from a failed node from a group essentially consisting of: rerouting the destination address to over an alternate path to the failover node from over an original path to the failed node; and, remapping the destination address from a first port connected to the failed node to a second port connected to the failover node.

17. The article of claim 16, wherein the computer-readable medium is located in a manager component, such that the means in the medium is for routing the destination address over the alternate path to the second node as selected by the manager component.

18. The article of claim 16, wherein the computer-readable medium is located in a switch having the first and the second ports, such that the means in the medium is for remapping the destination address from the first port to the second port.

19. The article of claim 16, wherein the computer-readable medium is located in a switch, such that the means is further for initially receiving an expanded port range from an assigning manager component due to the switch having one or more hidden output ports in addition to a visible output port.

20. The article of claim 16, wherein the medium is one of a recordable data storage medium and a modulated carrier signal.